

REMARKS

This paper is filed in response to the final official action dated November 19, 2007 (hereafter, “the official action”). This paper is timely filed.

Claims 1-32 are pending, but claims 18-24 have been withdrawn. Claims 1, 2, 5-16 and 25-32 stand rejected as anticipated by, or in the alternative, as obvious over U.S. Patent Publication No. 2001/0026878 to Woo et al. (“Woo”). Claims 1, 2, 4, 10, and 15-17 stand rejected as anticipated by, or in the alternative, as obvious over International Patent Publication No. WO 02/31896 Periyasamy et al. (“Periyasamy”). Claims 1-4 and 17 stand rejected as anticipated by, or in the alternative, as obvious over European Patent Publication No. EP 1220341 to Naito (“Naito”).

The examiner also objected to the title as not being sufficiently descriptive. The objection should be withdrawn in view of the amendment to the title presented herewith.

The various bases for the claim rejections are addressed below in the order presented in the official action. Reconsideration of the application, as amended and in view of the following remarks, is solicited.

CLAIM REJECTIONS

Claims 1, 2, 5-16, and 25-32 have been rejected as anticipated by or as obvious over Woo. Claims 1, 2, 4, 10, and 15-17 have been rejected as anticipated by or as obvious Periyasamy. Claims 1-4 and 17 have been rejected as anticipated by or as obvious Naito.

With respect to Woo, the examiner appears to have construed the polymers disclosed at paragraph [0019] as meeting the “cross-linked hole transporting and electron blocking material” limitation recited by all examined claims 1-17 and 25-32. However, no cross-linking bonds between the disclosed polymers are disclosed or suggested by Woo.

Similarly, with respect Perisamy, the examiner appears to have construed the disclosure of hole transport layers comprising PEDOT and/or PVK at page 26, Procedure 1, as meeting the “cross-linked hole transporting and electron blocking material” limitation recited by all examined claims 1-17 and 25-32. Again, there is no disclosure or suggestion that the hole transporting materials exemplified by Perisamy are cross-linked, as claimed.

Naito is deficient for the same reason. The hole transport layer comprising a PEDOT-PSS complex disclosed in paragraph [0070] is not cross-linked, as claimed, and there is no suggestion to cross-link this material. Furthermore, the Applicants note that PEDOT:PSS is disclosed in the application as a hole injecting material, and that such material is different from and can be used in combination with the hole transporting and electron blocking material recited in the claims. See the fourth full paragraph of page 5.

The "cross-linkable groups" referenced by the examiner in the Response to arguments section (see page 7 of the final action) are merely groups capable of undergoing chain extension (i.e., polymerization). The groups are not cross-linkable groups, as recited by all considered claims.

The applicants respectfully submit that the cross-linked hole transporting and electron blocking material is advantageous in that an organic semiconducting material may be deposited directly from solution thereover without causing dissolution of the underlying hole transporting and electron blocking material. Thus, intermixing of the organic semiconducting material and the hole transporting and electron blocking material is avoided. In contrast, it the hole transport layers of each of the cited prior art disclosures are susceptible to such intermixing.

CONCLUSION

It is submitted that the application is in condition for allowance. Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, he is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN LLP



Andrew M. Lawrence, Reg. No. 46,130
Attorney for Applicants
6300 Sears Tower
233 S. Wacker Drive
Chicago, Illinois 60606-6357
(312) 474-6300

January 21, 2008